

Date: Wednesday, 12/5/2007 10:37:16 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : TUBE ASSEMBLY
Job Number : 36147	
Estimate Number : 11527	
P.O. Number :	Part Number : D3021041
This Issue : 12/5/2007 S.O. No. :	Drawing Number : D3021/D3017
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : LARGE FAB ASSY	Drawing Revision : A/A
Previous Run : 34896	Material :
Written By : <u> </u>	Due Date : 1/10/2008 Qty: 1 Um: Each
Checked & Approved By : <u> </u>	
Comment : Est. 01.10.23 New Issue SM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M4130NT0750W049	4130 Tube .750 OD x.049W
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Comment: Qty.: 2.1875 f(s)/Unit Total : 2.1875 f(s)

4130 Tube .750 OD x.049W

Cut:- AISI 4130N tube, Ø3/4" x 0.049" wall

batch: M100843

PD 08.01.15

2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

1-Cut tube as per Dwg D3021

2-Drill tube as per Dwg D3021 using D3021-041T1

3--Deburr

PD 08.01.15

3.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

PD 08/01/23

4.0	M4130NS049	4130 Sheet .049 wall
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Comment: Qty.: 1.0500 sf(s)/Unit Total : 1.0500 sf(s)

4130 Sheet .049 wall

Cut:- AISI 4130N sheet, 18 gauge (0.050 thick)

batch: M11662

Identify For D3017-11 Cap

PD 08.01.29

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 08/02/08

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 12/5/2007 10:37:17 AM
User: Kim Johnston

Process Sheet

✓ Customer: CU-DAR001 Dart Helicopters Services Drawing Name: TUBE ASSEMBLY

Job Number: 36147

Part Number: D3021041

Job Number:



Seq. #: Machine Or Operation: Description :

5.0 LARGE FAB 1 LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1
1-Cut end caps as per Dwg D3017

2-Weld as per Dwg D3021

A/R Steel Rod Batch: M1000075

PD 08/01/29

6.0 QC9 VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

11/03/04/29

7.0 QC5 INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

11/05/01/29

8.0 POWDER COATING POWDER COATING



Comment: POWDER COATING
Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

M-H 08/02/05

9.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08-08-05

10.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: GA

mf 08-02-07

11.0 QC21 FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

11/08/02/08

Job Completion



mi 2008/12/08

(1)

U

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

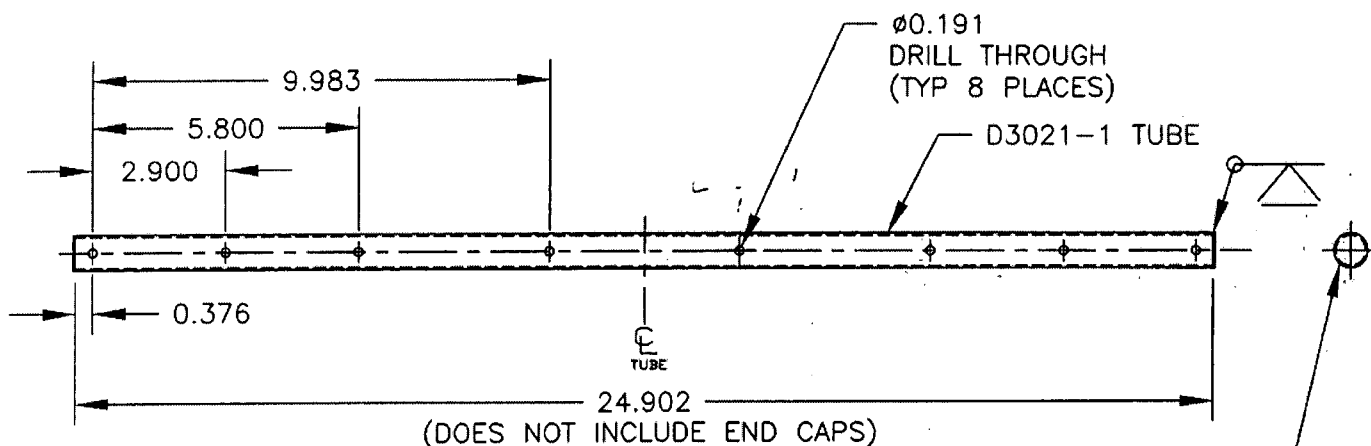
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN CP	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. D3021	REV. A SHEET 1 OF 1
DATE 01.05.18		TITLE TUBE ASSEMBLY	SCALE 1:4
A	01.05.18	NEW ISSUE	



D3021-041 TUBE ASSEMBLY
(D3021-1 TUBE)

NOTES:

- 1) PART IS SYMMETRIC ABOUT CENTERLINE
- 2) MATERIAL: AISI 4130 TUBE, $\phi 0.75$ DIA x 0.049 WALL (M4130N-T0750W049)
- 3) WELD PER DART QSI 004
- 4) FINISH: POWDER COAT GREY SANDTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

RELEASED
01.05.30

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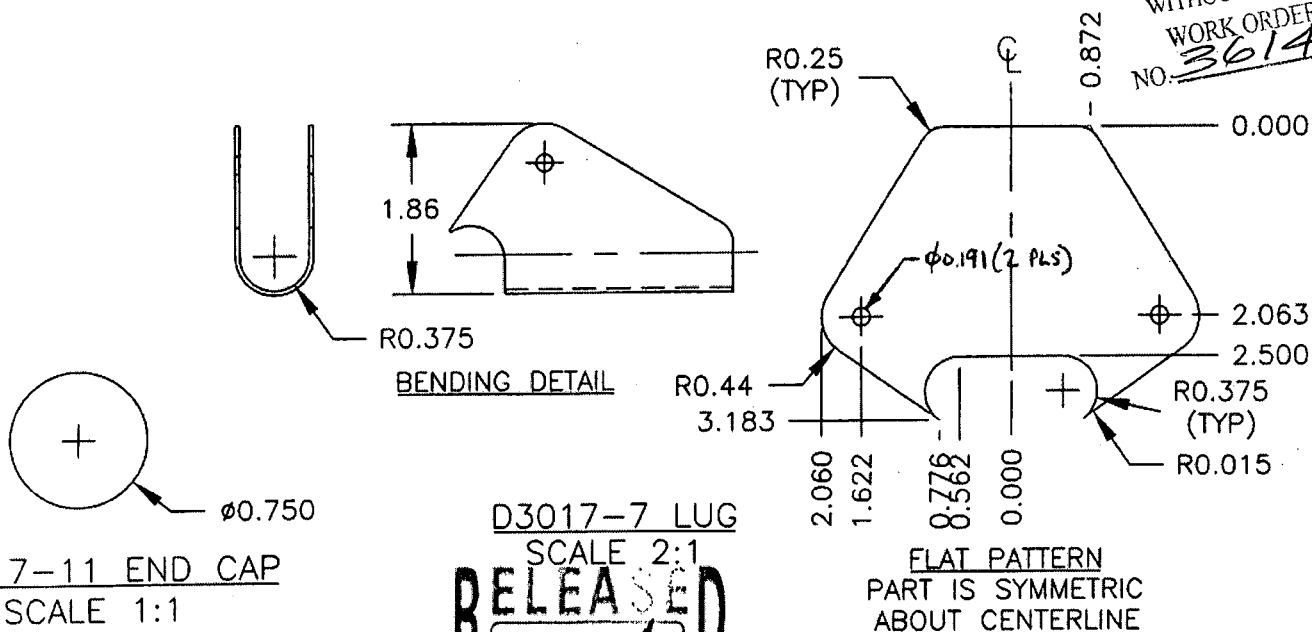
DESIGN <i>UP</i>	DRAWN BY <i>UP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3017	REV. A SHEET 1 OF 2
DATE 01.05.18		TITLE BACK FRAME ASSEMBLY	SCALE 1:1
A	01.05.18	NEW ISSUE	

QTY	PART No.	DESCRIPTION	MATERIAL
X	D3017-041	BACK FRAME ASSEMBLY	N/A
1	D3017-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3017-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3017-5	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
3	D3017-7	LUG	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3017-11	END CAP	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)

NOTES

- 1) WELD PER DART QSI 004
- 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES.
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 36147



D3017-11 END CAP
SCALE 1:1

D3017-7 LUG
SCALE 2:1

FLAT PATTERN
PART IS SYMMETRIC
ABOUT CENTERLINE

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